Merritt Parkway, James Farm Road Bridge Spanning the Merritt Parkway at the 36.24 mile mark Stratford Fairfield County Connecticut HAER No. CT-129

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record National Park Service U.S. Department of the Interior P.O. Box 37127 Washington, D.C. 20013-7127

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HISTORIC AMERICAN ENGINEERING RECORD

Merritt Parkway, James Farm Road Bridge

HAER No. CT-129

Location:

Spanning the Merritt Parkway at the 36.24 mile mark in Stratford, Fairfield

County, Connecticut

UTM: 18.657720.4567005

Ouad: Milford, Connecticut

Construction Date:

October 1940

Engineer:

Connecticut Highway Department

Architect:

George L. Dunkelberger, of the Connecticut Highway Department, acted as head

architect for all Merritt Parkway bridges.

Contractor:

Brunalli Construction Company

Southington, Connecticut

Present Owner:

Connecticut Department of Transportation

Wethersfield, Connecticut

Present Use:

Used by traffic on James Farm Road to cross the Merritt Parkway

Significance:

The bridges of the Merritt Parkway were predominately inspired by the Art Deco and Art Moderne architectural styles of the 1930s. Experimental forming techniques were employed to create the ornamental characteristics of the bridges. This, combined with the philosophy of incorporating architecture into bridge

design and the individuality of each structure, makes them distinctive.

Historians:

Todd Thibodeau, HABS/HAER Historian

Corinne Smith, HAER Engineer

August 1992

For more detailed information on the Merritt Parkway, refer to the Merritt Parkway History Report, HAER No. CT-63.

LOCAL HISTORY

In spring 1639, sixty-five settlers came to Cupheag (now Stratford) on the west bank of the Housatonic River where it meets the Long Island Sound. This group migrated from Wethersfield, 1ed by the Reverend Adam Blakeman.¹

As the town grew, land was bought from the surrounding Indian tribes until the community stretched twelve miles long and ten miles wide. In 1685, Stratford received its town patent from the Colonial Government of Connecticut. The community retained its original boundaries until 1789 when Huntington was granted civic independence; Trumbull separated in 1797, Bridgeport in 1821, and Monroe in 1823. The present town covers an area of nineteen-and-one-half square miles.²

Early Stratford was primarily a shipping and fishing center. The community was also the main crossing point for the Housatonic River. A ferry operated on the river from 1648 until the first bridge was built in 1795.³

The New York, New Haven and Hartford Railroad reached town in 1850. The railroad failed to bring manufacturing enterprises, but did encourage the summer-vacation industry. At the same time, the buying and selling of real estate became big business in Stratford.

The railroad also helped neighboring Bridgeport develop into a manufacturing center. Even though Bridgeport developed rapidly, Stratford remained primarily a residential community. The town's population started to increase in the 1880s as industrial workers from Bridgeport moved to

¹Dorothy Euerle, "History of Stratford, 1637-1989," (Manuscript, Stratford Public Library Vertical File).

²Euerle, 2.

³"Stratford, the Unhurried Town," (Manuscript, Stratford Public Library Vertical File, 1959), 2.

Stratford, to escape the noise and pollution within that city. This migration increased after 1890, when the Bridgeport Horse Car Company introduced service to Stratford. Within five years ridership warranted extending and electrifying the line.⁴

When plans for the Merritt Parkway were first announced, Stratford residents were upset by the route, which called for the road to cut south into their downtown before linking up with the Post Road/U.S. Route 1, and crossing the Housatonic River on the Washington Bridge. They realized the congestion this would create in their community and campaigned for a second bridge spanning the Housatonic.⁵ In 1938 the state obtained federal funding to build the Housatonic River Bridge. After completion the parkway does not appear to have had a dramatic impact on Stratford. The town was already a bedroom community for Bridgeport, and too far from New York City to attract a high number of commuters.

BRIDGE CONSTRUCTION HISTORY

The James Farm Road starts just south of the Merritt at Chapel Street and extends about two miles north to Armstrong Road. The Peter Mitchell Construction Company of Greenwich, CT, received the contract to grade the Merritt Parkway from Cutspring Road, in Stratford, to the Housatonic River. While the James Farm Road Bridge is located within this section of the Merritt, the grade separation and bridge contract went to the Brunalli Construction Company of Southington,

^{4&}quot;Stratford, the Unhurried Town," 4.

⁵Helen Binney Kitchel, "Story of the Merritt," <u>Greenwich Press</u>, 28 April 1938, p. 15.

CT (ConnDot project #180-141).⁶ The bridge cost \$25,904 and was under construction from May 7, 1940, to October 28, 1940. The paving work for this region of the Merritt also extended from Cutspring Road to the Housatonic River. This contract was awarded to the Osborn-Barnes Construction Company of Danbury, CT (ConnDot project #180-170). The James Farm Road Bridge has received little maintenance since it was built. Over the years some spalling concrete was removed and replaced.⁷

BRIDGE DESCRIPTION

The James Farm Road Bridge is a double-span, reinforced-concrete, barrel-type rigid-frame bridge. Each frame spans 38'-3" at a skew of 12°-36'-30" over two lanes of the Merritt Parkway. Parallel wing walls form the approach for the underpass. The bridge provides a 30' clear roadway for James Farm Road.

The rigid-frame design differs from most of the other bridges on the Merritt Parkway because it is shaped like a segmental arch, instead of an arched beam, supported on short walls. (See the Merritt Parkway History Report, HAER No. CT-63, for a more detailed description of the rigid-frame.) The twin frames are completely independent except for a shared footing at the center pier. The walls, which are the frame legs, are only 3' tall above the footing. The arches rise 13'-3" above the springline. The frame thickness increases from 1'-3" at the crown to over 2'-6" at the springline to almost 4'-6" at the footing. The spandrels of the arch are filled with gravel and bounded by

⁶Contract Card File, Map File and Engineering Records Department, Connecticut Department of Transportation, Wethersfield, CT.

⁷James Farm Road Bridge, DOT #759; Bridge Maintenance File, Engineering Department, Connecticut Department of Transportation, Newington, CT.

reinforced-concrete walls at the faces. The minimum clearance provided is 14' at a distance of 10' perpendicular to the centerline of the roadway.

The concrete surfaces are rusticated to imitate voussoirs across the arch and horizontal courses across the pylons and wing walls. The end pylons are rectangular and feature a cartouche with the initials 'CHD'. This labels the bridge a celebration bridge because the initials honor the Connecticut Highway Department. The cartouche was formed with a reverse mold. Each cylindrical center pylon serves as a pedestal for two identical pairs of uplifted, white precast wings. The sparkling whiteness is achieved with white quartz as the aggregate in the concrete. Sculptor Edward Ferrari created a symmetrical model for the wings despite the doubts of the concrete workers who would have to execute the final wings. The wings were complete when delivered on site except for a small portion of concrete that braced the four wings near the top. After installation, that piece was removed.

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News 14 (September/October 1991): 3.

-----. "Stratford, the Unhurried Town." Manuscript, Stratford Public Library Vertical File, 1959.

^{*}Catherine Lynn, "Edward Ferrari's Sculpture on the Merritt Parkway," <u>Connecticut Preservation</u> News 14 (September/October 1991): 3.

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- ------ Contract Card File. Map File and Engineering Records Department, Connecticut Department of Transportation: Wethersfield, CT. This includes construction drawings, copies of which are in the HAER field records.
- -----. Bridge Maintenance File. Engineering Department, Connecticut Department of Transportation: Newington, CT.

PROJECT INFORMATION

This recording project was undertaken by the Historic American Buildings Survey and the Historic American Engineering Record (HABS/HAER) Division of the National Park Service, Robert J. Kapsch, Chief. The Merritt Parkway recording project was sponsored and funded by the Connecticut Department of Transportation (ConnDot) and the Federal Highway Administration.

The fieldwork, measured drawings, historical reports and photographs were prepared under the general direction of Eric N. DeLony, HAER Chief, and Sara Amy Leach, HABS Historian.

The recording team consisted of Jacqueline A. Salame (Columbia University), architect and field supervisor; Mary Elizabeth Clark (Pratt Institute) and B. Devon Perkins (Yale University), architectural technicians; Joanne McAllister-Hewlings (US/ICOMOS-Great Britain, University of Sheffield), landscape architect; Corinne Smith (Cornell University), engineer; Gabrielle M. Esperdy (City University of New York) and Todd Thibodeau (Arizona State University), historians; and Jet Lowe, HAER photographer.